Poulton Lancelyn

Maths

Long Term Plan

Y4

2023/24

	W1- Number: Number and Place Value	W2 -Number: Number and Place Value	W3 – Number: Number and Place Value	W4 – Number: Number and Place Value	W5 – Number: Number and Place Value Number: Addition and Subtraction	W6 – Number: Addition and Subtraction	W7 – Number: Addition and Subtraction	
A1	**Recap from Y3:** recognise the place value of each digit in a three-digit number (hundreds, tens, ones) identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words **Y4:** recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) identify, represent numbers using different representations	Read and write numbers up to 1,000 in numerals and words Identify, represent and estimate numbers using different representations Identify, represent and estimate numbers using different representations Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones) Identify, represent and estimate numbers using different representations Count in multiples of 6, 7, 9, 25 and 1,000	Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s) Identify, represent and estimate numbers using different representations Find 1,000 more or less than a given number Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	Order and compare numbers beyond 1,000 Identify, represent and estimate numbers using different representations Round any number to the nearest 10, 100 or 1,000	Round any number to the nearest 10, 100 or 1,000	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Solve number and practical problems that involve all of the above and with increasingly large positive numbers	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	
Ready to Progress	4NPV–1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100. 4NPV–2 Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning. 4NPV–3 Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each. 4NPV–4 Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts			4NPV–3 Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.		4NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100).		
	W1 – Number: Addition and Subtraction	W2 – Number: Addition and Subtraction	W3 – Number: Addition and Subtraction	W4 – Measurement: Area	W5 – Number: Multiplication and Division	W6 – Number: Multiplication and Division	W7 - Number: Multiplication and Division	Week 8 - Number: Multiplication and Division
A2	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Find the area of rectilinear shapes by counting squares Estimate, compare and calculate different	Recall multiplication and division facts for multiplication tables up to 12 × 12	Recall multiplication and division facts for multiplication tables up to 12 × 12	Recall multiplication and division facts for multiplication tables up to 12 × 12	Use place value, known and derived facts to multiply and divide mentally, including:

	and subtraction where appropriate Estimate and use inverse operations to check answers to a calculation			measures, including money in pounds and pence				multiplying by 0 and 1; dividing by 1; multiplying together three numbers
Ready to Progress	4NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100).				4NF–1 Recall multiplication and division facts up to 12 × 12, and recognise products in multiplication tables as multiples of the corresponding number. 4MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. 5NF–1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice			
	W1 – Number: Multiplication and Division	W2 – Number: Multiplication and Division	W3 – Number: Multiplication and Division	W4 – Number: Multiplication and Division	W5 – Number: Multiplication and Division	W6 – Number: Multiplication and Division		
Sp1	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	Recognise and use factor pairs and commutativity in mental calculations Recall multiplication and division facts for multiplication tables up to 12 × 12 Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	Recall multiplication and division facts for multiplication tables up to 12 × 12 Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects Multiply two-digit and three-digit numbers by a one-digit number using formal written layout	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects Recognise and use factor pairs and commutativity in mental calculations Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	Recognise and use factor pairs and commutativity in mental calculations Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects		
Ready to Progress	4NF–1 Recall multiplication and division facts up to 12 × 12, and recognise products in multiplication tables as multiples of the corresponding number.	4NF–2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context. 4NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100). 4MD–1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size. 4MD–3 Understand and apply the distributive property of multiplication.						

	4MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. 5NF–1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice							
	W1 – Measurement: Length and Perimeter	W2 – Number: Fractions	W3 – Number: Fractions	W4 – Number: Fractions	W5 – Measurement: Mass			
Sp2	Convert between different units of measure [for example, kilometre to metre; hour to minute] Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Non-statutory guidance: They practise counting using simple fractions and decimals, both forwards and backwards Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators Compare and order unit fractions, and fractions with the same denominators	Compare and order unit fractions, and fractions with the same denominators Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	Add and subtract fractions with the same denominator Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number			
Ready to Progress	4G–2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.	4F–1 Reason about the location of mixed numbers in the linear number system. 4F–2 Convert mixed numbers to improper fractions and vice versa.		4F–3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers. 5F–1 Find non-unit fractions of quantities.				
	W1 – Number: Fractions including Decimals and Percentages	W2 – Number: Fractions including Decimals and Percentages	W3 – Number: Fractions including Decimals and Percentages	W4 - Number: Fractions including Decimals and Percentages	W5 – Number: Fractions including Decimals and Percentages	W6- Number: Fractions including Decimals and Percentages **NTS assessments**		

Su1	Recognise and write decimal equivalents of any number of tenths or hundredths	Recognise and write decimal equivalents of any number of tenths or hundredths Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	Recognise and write decimal equivalents of any number of tenths or hundredths Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	Recognise and write decimal equivalents of any number of tenths or hundredths Compare numbers with the same number of decimal places up to two decimal places	Recognise and write decimal equivalents of any number of tenths or hundredths Compare numbers with the same number of decimal places up to two decimal places	Estimate, compare and calculate different measures, including money in pounds and pence		
Ready to Progress				5NPV–2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning.				
	W1 – Measurement: Money (4 days) Measurement: Time (1 day)	W2 – Measurement: Time	W3 – Geometry: Properties of Shapes (days)	W4 – Geometry: Properties of Shapes	W5 – Statistics (4 days)	W6 – Statistics (2 days) Geometry: Position and Direction (3 days)	W7 – Geometry: Position and Direction (3 days) Fluency consolidation (2 days)	
Su 2	Estimate, compare and calculate different measures, including money in pounds and pence Convert between different units of measure [for example, kilometre to metre; hour to minute]	Convert between different units of measure [for example, kilometre to metre; hour to minute]	Identify acute and obtuse angles and compare and order angles up to two right angles by size Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Identify lines of symmetry in 2D shapes presented in different orientations Complete a simple symmetric figure with respect to a specific line of symmetry	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs Describe positions on a 2D grid as coordinates in the first quadrant Plot specified points and draw sides to complete a given polygon	Plot specified points and draw sides to complete a given polygon Describe movements between positions as translations of a given unit to the left/right and up/down Describe movements between positions as translations of a given unit to the left/right and up/down	
Ready to Progress			4G–2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons. 4G–3 Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.			4G–1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.		

Ready-to-progress criteria

Year 3 conceptual prerequesite	Year 4 ready-to-progress criteria	Future applications
Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10.	4NPV–1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.	Solve multiplication problems that that involve a scaling structure, such as '10 times as long'.
Recognise the place value of each digit in *three*-digit numbers, and compose and decompose *three*-digit numbers using standard and non-standard partitioning.	4NPV–2 Recognise the place value of each digit in *four*-digit numbers, and compose and decompose *four*-digit numbers using standard and non-standard partitioning.	Compare and order numbers. Add and subtract using mental and formal written methods.
Reason about the location of any *three*-digit number in the linear number system, including identifying the previous and next multiple of 10 and 100.	4NPV–3 Reason about the location of any *four*-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.	Compare and order numbers. Estimate and approximate to the nearest multiple of 1,000, 100 or 10.
Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.	4NPV–4 Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.	Read scales on graphs and measuring instruments.
Recall multiplication and division facts in the 5 and 10, and 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.	4NF–1 Recall multiplication and division facts up to 12×12, and recognise products in multiplication tables as multiples of the corresponding number.	Use multiplication facts during application of formal written methods. Use division facts during application of formal written methods.

Year 3 conceptual prerequesite	Year 4 ready-to-progress criteria	Future applications
Use known division facts to solve division problems. Calculate small differences, for example: $74 - 72 = 2$	4NF–2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, for example: $74 \div 9 = 8$ r 2 and interpret remainders appropriately according to the context.	Correctly represent and interpret remainders when using short and long division.
Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10), for example: $80 + 60 = 140$ $140 - 60 = 80$ $30 \times 4 = 120$ $120 \div 4 = 30$	4NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100), for example: $8 + 6 = 14$ and $14 - 6 = 8$ so $800 + 600 = 1,400$ $1,400 - 600 = 800$ $3 \times 4 = 12$ and $12 \div 4 = 3$ so $300 \times 4 = 1,200$ $1,200 \div 4 = 300$	Apply place-value knowledge to known additive and multiplicative number facts, extending to a whole number of larger powers of ten and powers of ten smaller than one, for example: $800,000 + 600,000 = 1,400,000$ $1,400,000 - 600,000 = 800,000$ $0.03 \times 4 = 0.12$ $0.12 \div 4 = 0.03$
Multiply two-digit numbers by 10, and divide three-digit multiples of 10 by 10.	4MD–1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.	Convert between different metric units of measure. Apply multiplication and division by 10 and 100 to calculations involving decimals, for example: $0.03 \times 100 = 3$ $3 \div 100 = 0.03$
Understand the inverse relationship between multiplication and division. Write and use multiplication table facts with the factors presented in either order.	4MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication.	Recognise and apply the structures of multiplication and division to a variety of contexts.
	4MD–3 Understand and apply the distributive property of multiplication.	Recognise when to use and apply the distributive property of multiplication in a variety of contexts.

Year 3 conceptual prerequesite	Year 4 ready-to-progress criteria	Future applications
Reason about the location of fractions less than 1 in the linear number system.	4F–1 Reason about the location of mixed numbers in the linear number system.	Compare and order fractions.
Identify unit and non-unit fractions.	4F–2 Convert mixed numbers to improper fractions and vice versa.	Compare and order fractions. Add and subtract fractions where calculation bridges whole numbers.
Add and subtract fractions with the same denominator, within 1 whole, for example: $\frac{2}{5}+\frac{2}{5}=\frac{4}{5}$	4F–3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers, for example: $\frac{7}{5}+\frac{4}{5}=\frac{11}{5}$ $3\frac{7}{8}-\frac{2}{8}=3\frac{5}{8}$ $7\frac{2}{5}+\frac{4}{5}=8\frac{1}{5}$ $8\frac{1}{5}-\frac{4}{5}=7\frac{2}{5}$	
Draw polygons by joining marked points.	4G–1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.	Draw polygons, specified by coordinates in the 4 quadrants.
Measure lines in centimetres and metres. Add more than 2 addends. Recall multiplication table facts.	4G–2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.	Draw, compose and decompose shapes according to given properties, dimensions, angles or area.
	4G–3 Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.	Draw polygons, specified by coordinates in the 4 quadrants: draw shapes following translation or reflection in the axes.